

## ABSTRACT

A media converter allowing the response test to be activated from cable side and easy detection of occurrence of a failure is disclosed. A pair of physical-layer interfaces to different types of transmission media are connected through  
5 a memory for temporarily storing data to be transferred between the physical-layer interfaces. The media converter determines whether a received block of data stored in the memory includes trigger data uniquely assigned to the media converter in a source address field of the received block of data. Only when the  
10 received block of data stored in the memory includes the trigger data, a response block of data corresponding to the received block of data is sent back to a source that has transmitted the received block of data.